Case Report

SUBMUCOSAL LIPOMAS: AN INFREQUENT CAUSE OF INTUSSUSCEPTION

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ABSTRACT

A 35 years old female, presented with acute abdominal pain, distension of abdomen, vomiting and absolute constipation. At laparotomy, ileoileal intussusception was found. Resection and anastomosis was done. Both gross examination of resected segment and histopathology report confirmed the submucosal lipomas as causative factor.

KEY WORDS: ***Intussusception. Lipoma, Submucosal. Resection. Anastomosis.***

INTRODUCTION

Intussusception is a serious problem of the intestine. When it occurs, part of the intestine collapses into itself, like a collapsible tube or an antenna folding in, with one part slipping inside another part. This makes the intestine not working properly. Intussusception occurs most commonly in babies between 6 months to 2 years. Boy babies are affected twice as often as girl babies[1].

Here is an example of an infrequent age group for this disease due to uncommon cause.

CASE REPORT

A 35 years old, unmarried female was admitted in a surgical emergency department of Liaquat University Hospital, with two days history of pain in abdomen, vomiting, distension of abdomen and absolute constipation. On examination, she looked ill, with pulse rate of 110 per minute, B.P 100/60 mmHg and temperature 99.6^{0}F. She was tachypneic, dehydrated and anaemic. On abdominal examination, it was grossly distended with generalized tenderness with mix pattern percussion notes and absent bowel sounds. Treatment with maintaining intravenous (I/V) line, putting nasogastric tube and catheterization was commenced. Blood samples were taken for blood complete picture, blood urea, sugar and serum electrolytes. Initial doses of cefotaxime sodium and metronidazole were given, and patient sent to ultrasonography and plain X-ray abdomen in erect and supine postures. Ultrasound remained inconclusive, while X-rays showed multiple air fluid levels in erect and dilated small intestine in supine film. Her haemoglobin was 9.6gm / dl, urea 39mg/dl, Na^+ 130mEq /L and K^+ 3.2mEq/L. A laparotomy was performed via a midline incision. On exploration, distended small gut with an ileo-ileal intussuception was found. After application of hot sponges reduction was done. But the reduced segment had multiple soft lipomatous swellings in the intramural portion of about 15cm, rest of the small intestine was free of any obvious pathology. Therefore resection of involved segment about two feet was performed followed by end-to-end-anatomosis in two layers. Postoperatively, patient was kept nil orally with I/V fluids, electrolytes and antibiotics cover. Her bowel sounds reappeared on third postoperative day and on the next day she opened her bowels. By this time we removed the nasogastric tube and liquids were allowed orally followed by semisolids. Meanwhile, we received histopathology report which confirmed the submucosal lipomas as the causative factor of intussusception. The patient's postoperative phase remained uneventful. She was discharged from the ward on 8th postoperative day. She attended surgical out door department after two weeks which was satisfactory.

DISCUSSION

Intussusception is one of the common surgical emergencies and a frequent cause of bowel obstruction in infancy and early childhood[2]. It was first described by Paul Barnette of Amsterdam in 1674. Jonathan Hutchison reported first successful operation in 1973[2]. Intussusception is the telescoping of a segment of bowel (intussusceptum) into the adjacent segment (intussuscipien)[3]. The majority of these occurs between 6 months to 2 years of age[1]. The most common form is intussusception of terminal ileum into the right colon (Ileocolic intussusception 75%), but ileoileal, ileocolic, jejunojejunal and colocolic intussusceptions also occur[4]. There is invariably a history of upper respiratory tract infection or gastroenteritis providing an aetiology for hypertrophy of peyer's patches[5], but in 95% of infants

and childrens a contributing cause is not found (Idiopathic or Priamry Intussusception)[6]. Mechanical factors such as Meckel's diverticulum[7], Polyps[6], intramural haematoma (Henoch Sehonlein purpura[6]), submucosal lipoma[7] and intestinal lymphoma are present with increasing frequency in patients over one year old and acts as leading point (Secondary Intussusception)[6]. Risk of intussusception following vaccination for rotavirus – infection has been studied in USA[8]. Small bowel intussusception is an uncommon cause of early postoperative obstruction, but accounts for 10% of cases in the pediatric age group[9]. Classical features include sudden intermittent attacks of severe abdominal pain (80-90%), between which the child may be completely well[5]. Most children vomit and this ultimately becomes bilious with red currant jelly stools and a palpable abdominal mass[6]. Tip of the intussusceptum may be felt some times on rectal examination. A plain X-ray abdomen may show loss of caecal shadow, but it is not a constant feature[10]. Barium enema may help in diagnosis but its main role is in hydrostatic reduction[11]. Ultrasound is a useful modality for screening all suspected cases of intussusception. Sonologist can demonstrate doughnut in transverse and pseudokidney sign in longitutinal section[12]. An initial attempt at hydrostatic reduction is always made in uncomplicated primary cases. However when an infant of less than three months or a child of more than three years present with intussusception, then a definite anatomical leading point is suspected. In such cases no attempt is made for hydrostatic reduction, and a laparotomy is performed[5]. Operative treatment can be proceeded via right mid abdominal transverse incision. Bowel is manipulated gently. After reduction, bowel is inspected for ischaemia and causative pathology. If there is any doubt, resection is performed. In advanced cases reduction may not be possible and en-mass resection should be carried out, followed by end-to-end anastomosis[5]. Postoperatively, electrolytes and urine output are closely monitored. Oral fluids are started only after abdomen is soft and flatus has been passed[6].

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